

Data Wrangling Part Two: Joins

Evan Fields

IAP 2015

January 7, 2015

Why join?

| Meal | Food |
|------------------|-----------|
| first breakfast | pancake |
| second breakfast | arugula |
| lunch | cookies |
| dinner | ice cream |

| Food | Rating |
|-----------|-----------|
| ice cream | delicious |
| arugula | fine |
| pancake | delicious |
| cookies | sublime |

| Meal | Food | Rating |
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Match on multiple columns

| Airport | Day | # flights |
|---------|-----|-----------|
| ATL | 5 | 2000 |
| BOS | 13 | 1400 |
| LAX | 13 | 1800 |
| ORD | 7 | 1000 |

Match on multiple columns

| Airport | Day | # flights |
|---------|-----|-----------|
| ATL | 5 | 2000 |
| BOS | 13 | 1400 |
| LAX | 13 | 1800 |
| ORD | 7 | 1000 |

| Airport | Day | Weather |
|---------|-----|----------|
| BOS | 23 | sunny |
| ATL | 5 | overcast |
| LGA | 13 | snow |
| ORD | 7 | rainy |

Match on multiple columns

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|---------|-----|-----------|----------|
| ATL | 5 | 2000 | overcast |
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Other joins: left outer join

| Name | Home |
|------------------|----------------|
| Ned Stark | Winterfell |
| Cersei Lannister | King's Landing |
| Varys | King's Landing |

Other joins: left outer join

| Name | Home |
|------------------|----------------|
| Ned Stark | Winterfell |
| Cersei Lannister | King's Landing |
| Varys | King's Landing |

| Name | Allegiance |
|------------------|---------------|
| Ned Stark | Stark |
| Cersei Lannister | Lannister |
| Jon Snow | Night's Watch |

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| Ned Stark | Winterfell |
| Cersei Lannister | King's Landing |
| Varys | King's Landing |

| Name | Allegiance |
|------------------|---------------|
| Ned Stark | Stark |
| Cersei Lannister | Lannister |
| Jon Snow | Night's Watch |

| Name | Home | Allegiance |
|------------------|----------------|------------|
| Ned Stark | Winterfell | Stark |
| Cersei Lannister | King's Landing | Lannister |
| Varys | King's Landing | NA |

Other joins: right outer join

| Name | Home |
|------------------|----------------|
| Ned Stark | Winterfell |
| Cersei Lannister | King's Landing |
| Varys | King's Landing |

| Name | Allegiance |
|------------------|---------------|
| Ned Stark | Stark |
| Cersei Lannister | Lannister |
| Jon Snow | Night's Watch |

| Name | Home | Allegiance |
|------------------|----------------|---------------|
| Ned Stark | Winterfell | Stark |
| Cersei Lannister | King's Landing | Lannister |
| Jon Snow | NA | Night's Watch |

Other joins: full outer join

| Name | Home |
|------------------|----------------|
| Ned Stark | Winterfell |
| Cersei Lannister | King's Landing |
| Varys | King's Landing |

| Name | Allegiance |
|------------------|---------------|
| Ned Stark | Stark |
| Cersei Lannister | Lannister |
| Jon Snow | Night's Watch |

| Name | Home | Allegiance |
|------------------|----------------|---------------|
| Ned Stark | Winterfell | Stark |
| Cersei Lannister | King's Landing | Lannister |
| Varys | King's Landing | NA |
| Jon Snow | NA | Night's Watch |